

Development of a Network Database System for Thermophysical Property Data

T. Baba and A. Ono

*National Research Laboratory of Metrology
Tsukuba, Ibaraki 305-8563, Japan*

Most of the present thermophysical property databases are "centralized databases," each of which is constructed and operated by a single organization. It is necessary to continue maintenance solely by the organization in order to keep the thermophysical property database updated.

We have proposed a concept of a "network database system" for thermophysical property data, where a large number of organizations can collaborate to construct a thermophysical property database. Each organization maintains an independent database in a personal computer and accumulates, inputs, updates, customizes, and utilizes the database independently. These independent databases are merged into the master database on the database server in a key organization using a utility to merge databases. Then, the master database is opened to the Internet.

Because each local database is continually maintained by an individual organization, the ownership, copyright, and originality of the local databases are guaranteed.